

## Dr Massimiliano (Max) Di Luca

Dr Massimiliano (Max) Di Luca of the School of Psychology describes, in 60 seconds, his research in multisensory perception in the Centre for Computational Neuroscience and Cognitive Robotics (CNCR).

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My name is Max Di Luca and I research multisensory perception in the CNCR centre.

Our brain continuously receives multiple streams of sensory signals (like me speaking, the ticking sound, and this countdown clock). To keep track of time until this movie finishes, for example, our brain combines sensory information at every instant with the expectation – based on the clock - of how long the movie is supposed to last.

I use psychophysical experiments to measure perception with the goal of creating models of how the brain processes information. Basically, I'm trying to determine the mathematical equation used by the brain to convert sensory signals into a perception. In particular I'm considering how the brain deals with multiple signals that are dynamic and that are connected to our actions.

The outcome of my research is to improve the understanding of how the brain works, and to employ such knowledge to create better technology and to improve how robots interact with their environment. .

[Dr Max Di Luca's profile \(http://massimilianodiluca.info\)](http://massimilianodiluca.info)

[Centre for Computational Neuroscience and Cognitive Robotics \(/research/activity/cncr/index.aspx\)](/research/activity/cncr/index.aspx)

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